

City of Burbank - COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

Permit Requirements: NONRESIDENTIAL, HIGH-RISE RESIDENTIAL, HOTEL/MOTEL REROOFS

<u>PERMIT APPLICATION REQUIREMENTS:</u> Roof recovering of a nonresidential, high-rise residential or hotel/motel building must meet the following energy and inspection requirements.

1. ENERGY REQUIREMENTS: If more than 50 percent or more than 2,000 square feet of roof is being replaced, recovered or recoated, a Certificate of Compliance shall be submitted with the permit application **and** the project shall comply with **either** the Prescriptive **or** the Performance Approach.

Exception: The roof recovering is excepted from the above when all of the following occur:

- 1. The existing roof has a rock or gravel surface, and
- 2. The new roof has a rock or gravel surface, and
- 3. There is no removal of existing layers of roof coverings of more than 50 percent or 2,000 square feet of roof, and
- 4. There is no recoating with a liquid applied coating, and
- 5. There is no installation of a recover board, rigid insulation, or other rigid, smooth substrate to separate and protect the new roof recovering from the existing roof.

Prescriptive approach. Roof covering products shall meet the following requirements based on building type:

- Nonresidential Buildings only:
 - 1. Low-sloped roofs (2:12 and below) shall meet the requirements of either a or b:
 - a. Minimum Aged Solar Reflectance of 0.55 AND a minimum Thermal Emittance of 0.75, or
 - b. Minimum Solar Reflectance Index of 64
 - 2. Steep-sloped roofs (greater than 2:12) with roofing product density less than 5 lbs/sq. ft. shall meet a or b:
 - Minimum Aged Solar Reflectance of 0.20 AND a minimum Thermal Emittance of 0.75, or
 - b. Minimum Solar Reflectance Index of 16
 - 3. Steep-sloped roofs (greater than 2:12) with a roofing product density of 5 lbs/sq. ft. shall meet a or b:
 - a. Minimum Aged Solar Reflectance of 0.15 AND a minimum Thermal Emittance of 0.75, or
 - b. Minimum Solar Reflectance Index of 10
- All Buildings:

When low-sloped roofs are exposed to the roof deck or to the recover boards, the exposed area shall be insulated to a continuous insulation level according to building type:

Nonresidential: R-8 with a U-factor of 0.081.

High-rise residential and guest rooms of hotels/motels buildings: R-14 with a U-factor of 0.055.

Exceptions to the continuous insulation level requirement for both building types:

- 1. The existing roof is insulated with at least R-7 insulation or it has a U-factor lower than 0.089.
- 2. If existing mechanical equipment on the roof is not being disconnected and lifted as part of the roofing replacement, insulation shall be added to reach a maximum thickness of 8 inches from the roof membrane surface to the top of the base flashing.
- 3. If adding required insulation reduces the base flashing height to less than 8 inches at penthouse or parapet walls, the insulation added may be limited to the maximum thickness of 8 inches from the roof membrane surface to the top of the base flashing, provided that all of the following conditions apply:
 - a. The penthouse or parapet walls are finished with an exterior cladding material other than the roofing cover, and
 - b. For nonresidential buildings, the ratio of the replaced area to the linear dimension of affected walls shall be less than 100 square feet per linear foot, or
 - c. For high-rise residential and hotels/motels, the ratio of the replaced roof area to the linear dimension of affected penthouse or parapet walls shall be less than 25 square feet per linear foot.
- 4. Tapered insulation may be used which has a thermal resistance less than the prescribed level at the drains and other low points, provided that the thickness of insulation is increased at the high points of the roof so that the average thermal resistance equals or exceeds the value that is specified above in this section.

<u>Performance Approach.</u> A computer-generated report shall be submitted with the application that uses the Overall Envelope TDV Energy Approach as stated in Section 149(b)1B of the Building Energy Efficiency Standards.

- **2. INSPECTION:** The permit holder must arrange for the following inspections.
 - 1. Roof Sheathing The roof sheathing shall be inspected after installation but before application of roof paper to verify boundary and field nailing to the framing. Nail heads shall be flush with the surface of the plywood and not overdriven.
 - 2. Final Inspection A final inspection is required to verify that roof shingles and flashing have been installed according to code and energy requirements. In order to be valid, the permit must be finaled.

NOTES: 1. A repair is replacement of no more than one roof square, or 100 square feet, of roof covering.